Attorney's Docket No.: 15670-053001/SD2001-205-4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Sanjay K. Nigam et al. Art Unit: 1652
Serial No.: 10/608,783 Examiner: Unknown
Filed : June 27, 2003
Title : METHODS OF TISSUE REPAIR AND REGENERATION AND TISSUE ENGINEERED COMPOSITIONS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Dear Sir:

Applicants call attention to the attached Information Disclosure Statement and documents listed on form PTO-1449.

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The documents are in the English language; hence no concise explanation is necessary per Rule 98(a)(3).

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U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						
	AC						
	AD						
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	AG						
	AH						
	AI						
	AJ						
	AK						

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No
	AL							
	AM							
	AN							
	AO							
	AP							

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AQ	Milner, et al., "A Novel 17 kD Heparin-Binding Growth Factor (HBGF-8) in Bovine Uterus: Purification and N-Terminal Amino Acid Sequence", Biochemical and Biophysical Research Communications, Vp;/ 165, No. 3, pp. 1096-1103, December 29, 1989
	AR	Mitsiadis, et al., "Expression of the heparin-binding cytokines, midkine (MK) and HB-GAM (pleiotrophin) is associated with epithelial-mesenchymal interactions during fetal development and organogenesis", Development, Vol. 121, pp. 37-51, 1995
	AS	Sato, et al., "Pleiotrophin as a Swiss 3T3 Cell-Derived Potent Mitogen for Adult Rat Hepatocytes", Experimental Cell Research, Vol. 246, Number 1, pp. 152-164, January 10, 1999

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Examiner Initial	Desig. ID	Document
	AT	Kurtz, et al., "Pleiotrophin and Midkine in Normal Development and Tumor Biology", Critical Reviews in Oncogenesis, Vol. 6, No. 2, pp. 151-177, 1995
	AU	Rauvala, et al. "Expression of HB-GAM (heparin-binding growth-associated molecules) in the pathways of developing axonal processes in vivo and neurite outgrowth in vitro induced by HB-GAM" Developmental Brain Research, Voll. 79, pp. 157-176, 1994
	AV	Imai, et al., "Osteoblast Recruitment and Bone Formation Enhanced by Cell Matrix-associated Heparin-binding Growth-associated Molecule (HB-GAM), The Journal of Cell Biology, Vol. 143, Number 4, pp. 1113-1128, November 16, 1998
	AW	Tomita, et al, "Direct in Vivo Gene Introduction into Rat Kidney", Biochemical and Biophysical Research Communications, Vol. 186, No. 1, pp. 129-134, July 15, 1992
	AX	Zhu, et al., "Systemic Gene Expression After Intravenous DNA Delivery into Adult Mice", Science, Vol. 261, pp. 209-211, July 9, 1993
	AY	Moullier, et al., "Adenoviral-mediated gene transfer to renal tubular cells *in vivo*", Kidney International, Vol. 45, pp. 1220-1225, 1994
	AZ	Montesano, et al., "Induction of Epithelial tubular Morphogenesis in Vitro by Fibroblast-Derived Soluble Factors", Cell, Vol. 66, pp. 697-711, August 23, 1991
	AAA	Bladt, et al., "Essential role for the c-met receptor in themigration of myogenic precursor cells into the limb bud", Nature, Vol. 376, No. 6543, pp. 68-771, August 31, 1995
	ABB	Schmidt, et al., "Scatter factor/hepatocyte growth factor is essential for liver development", Nature, Vol. 373, No. 6516, pp. 699-702, February 23, 1995
	ACC	Schuchardt, et al., "Renal agenesis and hypodysplasia in ret-k- mutant mice result from defects in ureteric bud development", Development, Vol. 122, No. 6, pp. 1919-1929, June, 1996
	ADD	Metzger, et al., "Genetic Control of Branching Morphogenesis", Science, Vol. 284, pp. 1635-1639, June 4, 1999
	AEE	Ohuchi, et al., "FGF10 Acts as a Major Ligand for FGF Receptor 2 IIIb in Mouse Multi-Organ Development", Biochemical and Biophysical Research Communications, Vol. 277, No. 3, pp. 643-649, November 2, 2000
	AFF	Bullock, et al., "Renal agenesis in mice homozygous for a gene trap mutation in the gene encoding heparan sulfate 2-sulfotransferase", Genes & Development, Vol. 12, No. 12, pp. 1894-1906, June 15, 1998
	AGG	Bullock, et al., "Developmental and species differences in the response of the ureter to metabolic inhibition", European Journal of Physiology, Vol. 436, No. 3, pp. 443-448, August, 1998
	AHH	Davies, et al., "Sulphated proteoglycan is required for collecting duct growth and branching but not nephron formation during kidney development", Development, Vol. 121, Issue 5, pp. 1507-1517, 1995
	AII	Kispert, et al., "Proteoglycans are required for maintenance of Wnt-11 expression in the ureter tips" Development, Vol. 122, pp. 3627-3637, 1996
	AJJ	Montesano, et al., "Identification of a Fibroblast-Derived Epithelial Morphogen as Hepatocyte Growth Factor", Cell, Vol. 67, No. 5, pp. 901-908, November 29, 1991
	AKK	Zelzer, et al., "Cell fate choices in *Drosophila* tracheal morphogenesis", BioEssays, Vol. 22, No. 3, pp. 219-226, March, 2000
	ALL	Enomoto, et al., "GFRα-1 Deficient Mice Have Deficits in the Enteric Nervous System and Kidneys", Neuron, Vol. 21, No. 2, pp. 317-324, August, 1998

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	AMM	Imai, et al., "Towards gene therapy for renal diseases", Nephrologie, Vol. 18, No. 7, pp. 397-402, 1998
	ANN	Imai, et al., "Gene transfer and kidney disease", Journal of Nephrology, Vol. 11, No. 1, pp. 16-19, January-February, 1998
	AOO	Imai, et al., "Strategies of gene transfer fo the kidney", Kidney, Vol. 53, No. 2, pp. 264-272, February, 1998
	APP	Meng, et al., "Pleiotrophin signals increased tyrosine phosphorylation of β-catenin through inactivation of the intrinisic catalytic activity of the receptor-type protein tyrosine phosphatase β/ζ", Proc. Natl. Acad. Sci., Vol. 97, No. 6, pp. 2603-2608, March 14, 2000
	AQQ	Vainio, et al., "Epithelial-Mesenchymal Interactions Regulate the Stage-Specific Expression of a Cell Surface Proteoglycan, Syndecan, in the Developing Kidney", Developmental Biology, Vol. 134, No. 2, pp. 382-391, August, 1989
	ARR	Vainio, et al., "Syndecan and Tenascin Expression is Induced by Epithelial-Mesenchymal Interactions in Embryonic Tooth Mesenchyme", The Journal of Cell Biology, Vol. 108, No. 5, pp. 1945-1954, May, 1989
	ASS	Ohuchi, et al., "Renal tubular effects of endothelin-B receptor signaling: its role in cardiovascular homeostasis and extracellular volume regulation", Curr Opin Nephrol Hyperten., Vol. 9, No. 4, pp. 435-439, July, 2000
	ATT	Thadhani, et al., "Acute renal failure", The New England Journal of Medicine, Vol. 334, No. 2, pp. 1448-1460, May 30, 1996
	AUU	Bonventre, et al., "Acture renal failure. I. Relative importance of proximal vs. distal tubular injury", Am. J. Physiol, Vol. 275, No. 5, pp. F623-F631, November, 1998
	AVV	Molitoris, et al., "Acute renal failure. II. Experimental models of acute renal failure: imperfect but indispensable", Am. J. Physiol. Renal Physiol., Vol. 278, No. 1, pp. F1-F12, January, 2000
	AWW	Fish, et al., "Alterations of Epithelial Polarity and the Pathogenesis of Disease States", The New England Journal of Medicine, Vol. 330, No. 14, pp. 1580-1588, April 7, 1994
	AXX	Tsukamoto, et al., "Tight Junction Proteins Form Large Complexes and Associate with the Cytoskeleton in an ATP D epletion Model for Reversible Junction Assembly", The Journal of Biological Chemistry, Vol. 272, No. 26, pp. 16133-16139, June 27, 1997
	AYY	Hammerman, et al., "Acute renal failure. III. The role of growth factors in the process of renal regeneration and repair", Am. J. Physiol. Renal Physiol., Vol. 279, No. 1, pp. F3-F11, July, 2000
	AZZ	Gailit, et al., "Redistribution and dysfunction of integrins in cultured renal epithelial cells exposed to oxidative stress", American Journal of Physiology, Vol. 264, No. 1, pp. F149-F157, January, 1993
	AAAA	Lieberthal, et al., "β Integrin-Mediated Adhesion between Renal Tubular Cells after Anoxic Injury", Journal of the American Society of Nephrology, Vol. 8, Issue 2, pp. 175-183, February, 1997
	ABBB	Zuk, et al., "Polarity, integrin, and extracellular matrix dynamics in the postischemic rat kidney", American Journal of Physiology, Vol. 275, No. 3, pp. C711-C731, September, 1998
	ACCC	Gumbiner, et al., "The Role of the Cell Adhesion Molecule Uvomorulin in the Formation and Maintenance of the Epithelial Junctional Complex", The Journal of Cell Biology, Vol. 107, No. 4, pp. 1575-1587, October, 1988
	ADDD	McNeill, et al., "Novel Function of the Cell Adhesion Molecule Uvomorulin as an Inducer of Cell Surface Polarity", Cell, Vol. 62, No. 2, pp. 309-316, July 27, 1990

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	AEEE	Mandel, et al., "ATP depletion: a novel method to study junctional properties in epithelial tissues. II. Internalization of Na^+, K^+-ATPase and E-cadherin", Journal of Cell Science", Vol. 107, Part 12, pp. 309-316, December, 1994
	AFFF	Tsukita, et al., "Structural and signalling molecules come together at tight junctions", Current Opinion in Cell Biology, Vol. 11, No. 5, pp. 628-633, October, 1999
	AGGG	Denker, et al., "Molecular structure and assembly of the tight junction", American Journal of Physiology, Vol. 274, No. 1, pp. F1-F9, January, 1998
	AHHH	Gopalakrishnan, et al., "Rho GTPase signaling regulates tight junction assembly and protests tight junctions during ATP depletion", American Journal of Physiology, Vol. 275, No. 3, pp. C798-C809, September, 1998
	AIII	Kuznetsov, et al., "Folding of Secretory and Membrane Proteins", The New England Journal of Medicine, Vol. 339, No. 23, pp. 1688-1695, December 3, 1998
	AJJJ	Van Why, et al., "Thresholds for cellular disruption and activation of the stress response in renal epithelia", American Journal of Physiology, Vol. 277, No. 2, pp. F227-F234, August, 1999
	AKKK	Gething, et al., "Protein folding in the cell", Nature, Vol. 355, No. 6355, pp. 33-45, January, 1992
	ALLL	Gabai, et al., "Rise in heat-shock protein level confers tolerance to energy deprivation", FEBS Letters, Vol. 327, No. 3, pp. 247-250, August, 1993
	AMMM	Georgopoulos, et al., "Role of the major heat shock proteins as molecular chaperones", Annual Review of Cell Biology, Vol. 9, pp. 601-634, 1993
	ANNN	Yoo, et al., "Anti-Inflammatory Effect of Heat Shock Protein Induction is Related to Stabilization of IκBα Through Preventing IκB Kinase Activation in Respiratory Epithelial Cells", The Journal of Immunology, Vol. 164, No. 10, pp. 5416-5423, May 15, 2000
	AOOO	Rauchman, et al., "An osmotically tolerant inner medullary collecting duct cell line from an SV40 transgenic mouse", American Journal of Physiology, Vol. 265, No. 3, pp. F416-F424, September, 1993
	APPP	Barasch, et al., "A ureteric bud cell line induces nephrogenesis in two steps by two distinct signals", American Journal of Physiology, Vol. 271, No. 1, pp. F50-F61, July, 1996
	AQQQ	Barasch, et al., "Ureteric bud cells secrete multiple factors, including bFGF, which rescue renal progenitors from apoptosis", American Journal of Physiology, Vol. 273, No. 5, pp. F757-F767, November, 1997
	ARRR	Laitinen, et al., "Changes in the Glycosylation Pattern During Embryonic Development of Mouse Kidney as Revealed with lectin Conjugates", The Journal of Histochemistry and Cytochemistry, Vol. 35, No. 1, pp. 55-65, 1987
	ASSS	Gilbert, et al., "Defect of Nephrogenesis Induced by Gentamicin in Rat Metanephric Organ Culture", Laboratory Investigation, Vol. 70, No. 5, pp. 656-666, May, 1994
	ATTT	O'Rourke, et al., "Expression of c-ret promotes morphogenesis and cell survival in mIMCD-3 cells", American Journal of Physiology, Vol. 276, No. 4, pp. F581-F589, April, 1999
	AUUU	Al-Awqati, et al., "Architectural patterns in branching morphogenesis in the kidney", Kidney International, Vol. 54, No. 6, pp. 1832-1842, December, 1998
	AVVV	Liu, et al., "Comparative Role of Phosphotyrosine Kinase Domains of c-ros and c-ret Protooncogenes in Metanephric Development with Respect to Growth Factors and Matrix Morphogens", Developmental Biology, Vol. 178, pp. 133-148, 1996

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	AWWW	Rauvala, et al., "An 18-kd heparin-binding protein of developing brain that is distinct from fibroblast growth factors", The EMBO Journal, Vol. 8, no. 10, pp. 2933-2941, 1989
	AXXX	Li, et al., "Cloning and Expression of a Developmentally Regulated Protein that Induces Mitogenic and Neurite Outgrowth Activity", Science, Vol. 250, No. 4988, pp. 1690-1694, December 21, 1990
	AYYY	Vanderwinden, et al., "Cellular distribution of the new growth factor Pleiotrophin (HB-GAM) mRNA in developing and adult rat tissues", Anat. Embryol., Vol. 186, pp. 387-406, 1992
	AZZZ	Kuznetsov, et al., "Perturbations in maturation of secretory proteins and their association with endoplasmic reticulum chaperones in a cell culture model for epithelial eschemia", Proc. Natl. Acad. Sci., Vol. 93, pp. 8584-8589, August, 1996
	AAAAA	Molitoris, et al., "Role of the actin cytoskeleton in ischemia-induced cell injury and repair", Pediatric Nephrol., Vol. 11, pp. 761-767. 1997
	ABBBB	Bush, et al., "Selective degradation of E-cadherin and dissolution of E-cadherin-catenin complexes in epithelial ischemia", Am. J. Physiol. Renal Physiol., Vol. 278, pp. F847-852, 2000
	ACCCC	Bush, et al., "Pretreatment with inducers of ER molecular chaperones protects epithelial cells subjected to ATP depletion", Am. J. Physiol. Renal Physiol., Vol. 277, pp. F211-218, 1999
	ADDDD	Hammerman, et al., "Acute renal failure. III. The role of growth factors in the process of renal regeneration and repair", Am. J. Physiol. Renal Physiol., Vol. 279, pp. F3-F11, 2000
	AEEEE	Steinberg, et al., "Cadherins and their connections: adhesion junctions have broader functions", Curr. Opin. Cell Biol., Vol. 11, No. 5, pp. 554-560, October, 1999
	AFFFF	Le, et al., "Recycling of E-Cadherin: A Potential Mechanism for Regulating Cadherin Dynamics", The Journal of Cell Biology, Vol. 146, No. 1, pp. 219-232, July 12, 1999
	AGGGG	Denker, et al., "Molecular structure and assembly of the tight junction", Am. J. Physiol. Renal Physiol, Vol. 274, pp. F1-F9, 1998
	AHHHH	Tsukamoto, et al., "Role of tyrosine phosphorylation in the reassembly of occludin and other tight junction proteins", Am. J. Physiol. Renal Physiol., Vol. 276, pp. F737-750, 1999
	AIIII	Ye, et al., "A role for intracellular calcium in tight junction reassembly after ATP depletion-repletion", Am. J. Physiol. Renal Physiol., Vol. 277, pp. F524-F532, 1999
	AJJJJ	Nigam, et al., "A Set of Endoplasmic Reticulum Proteins Possessing Properties of Molecular Chaperones Includes Ca^{2+}-binding Proteins and Members of the Thioredoxin Superfamily", The Journal of Biological Chemistry, Vol. 269, No. 3, pp. 1744-1749, January 21, 1994
	AKKKK	Bush, et al., "Proteasome Inhibition Leads to a Heat-shock Response, Induction of Endoplasmic Reticulum Chaperones, and Thermotolerance", The Journal of Biological Chemistry, Vol. 272, No. 14, pp. 9086-9092, April 4, 1997
	ALLLL	Dong, et al., "Intracellular CA^{2+} Thresholds That Determine Survival or Death of Energy-Deprived Cells", American Journal of Pathology, Vol. 152, No. 1, pp. 231-240, January 1998
	AMMMM	Kribben, et al., "Evidence for Role of Cytosolic Free Calcium in Hypoxia-Induced Proximal Tubule Injury", J. Clin. Invest., Vol. 93, pp. 1922-1929, May, 1994
	ANNNN	Liu, et al., "Endoplasmic Reticulum Stress Proteins Block Oxidant-induced CA^{2+} Increases and Cell Death", The Journal of Biological Chemistry, Vol. 273, No. 21, pp. 12858-12862, May 22, 1998
	AOOOO	Yu, et al., "The Endoplasmic Reticulum Stress-Responsive Protein GRP78 Protects Neurons Against Excitotoxicity and Apoptosis: Suppression of Oxidative Stress and Stabilization of Calcium Homeostasis", Experimental Neurology, Vol. 155, No. 2, pp. 302-314, February, 1999

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	APPPP	Bian, et al., "Roles of Cytoplasmic Ca^{2+} and intracellular CA^{2+} stores in induction and suppression of apoptosis in S49 cells", American Journal of Physiology, Vol. 272, No. 4, pp. C1241-1249, April, 1997
	AQQQQ	Bush, et al., "Genesis and reversal of the ischemic phenotype in epithelial cells", The Journal of Clinical Investigation, Vol. 106, No. 5, pp. 621-626, September, 2000
	ARRRR	Qiao, et al., "Branching morphogenesis independent of mesenchymal-epithelial contact in the developing kidney", Proc. Natl. Acad. Sci., Vol. 96, pp. 7330-7335, June, 1999
	ASSSS	Santos, et al., "Modulation of HGF-Induced Tubulogenesis and Branching by Multiple Phosphorylation Mechanisms", Developmental Biology, Vol. 159, pp. 535-548, 1993
	ATTTT	Santos, et al., "HGF-Induced Tubulogenesis and Branching of Epithelial Cells is Modulated by Extracellular Matrix and TGF-ß", Developmental Biology, Vol. 160, pp. 293-302, 1993
	AUUUU	Santos, et al., "Involvement of Hepatocyte Growth Factor in Kidney Development", Developmental Biology, Vol. 163, pp. 525-529, 1994
	AVVVV	Barros, et al., "Differential tubulogenic and branching morphogenetic activities of growth factors: Implications for epithelial tissue development", Proc. Natl. Acad. Sci. Vol. 92, pp 4412-4416, May, 1995
	AWWWW	Pavlova, et al., "Evolution of gene expression patterns in a model of branching orphogenesis", Am. J. Physiol. Renal Physiol., Vol. 277, pp. F650-F663, 1999
	AXXXX	Grobstein, et al., "Inductive Epithelio-mesenchymal Interaction in Cultured Organ Rudiments of the Mouse", Science, Vol. 118, No. 3053, pp. 52-55, July 3, 1953
	AYYYY	Grobstein, "Morphogenetic Interaction between Embryonic Mouse Tissues separated by a Membrane Filter", Nature, Vol. 172, pp. 869-871, July 4, 1953-December 26, 1953
	AZZZZ	Grobstein, et al., "Inductive Interaction in the Development of the Mouse Metanephros", The Journal of Experimental Zoology, Vol. 130, pp. 319-339, October, November, December, 1955
	AAAAAA	Saxen, Organogenesis of the Kidney, (table of contents) Cambridge University Press, Cambridge, 1987
	ABBBBB	Davies, et al., "Inductive Interactions between the Mesenchyme and the Ureteric Bud", Experimental Nephrology, Vol. 4, pp. 77-85, March-April, 1996
	ACCCCC	Vainio, et al., "Inductive Tissue Interactions, Cell Signaling and the Control of Kidney Organogenesis", Cell, Vol. 90, pp. 975-978, September 19, 1997
	ADDDDD	Schofield, et al., "Growth Factors and Metanephrogenesis", Experimental Nephrology, Vol. 4, pp. 97-104, March-April, 1996
	AEEEEE	Nigam, "Determinants of branching tubulogenesis", Current Opinion in Nephrology and Hypertension,Vo. 4, No. 3, pp. 209-214, 1995
	AFFFFF	Sakurai, et al., "*In vitro* branching tubulogenesis: Implications for developmental and cystic disorders, nephron number, renal repair, and nephron engineering", Kidney International, Vol. 54, pp. 14-26, 1998
	AGGGGG	Schuchardt, et al., "Defects in the kidney and enteric nervous sytem of mice lacking the tyrosine kinase receptor Ret", Nature, Vo. 367, pp. 380-383, January 27, 1994
	AHHHHH	Durbec, et al., "GDNF signalling through the Ret receptor tyrosine kinase", Nature, Vol. 381, No. 6585, pp. 789-793, June 27, 1996
	AIIIII	Sanchez, et al., "Renal agenesis and the absence of enteric neurons in mice lacking GDNF", Nature, Vol. 382, No. 6586, pp. 70-73, July 4, 1996

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	AJJJJJ	Pichel, et al., "Defects in enteric innervation and kidney development in mice lacking GDNF", Nature, Vol. 382, No. 6586, pp. 73-76, July 4, 1996
	AKKKKK	Moore, et al., "Renal and neuronal abnormalities in mice lacking GDNF", Nature, Vol. 382, No. 6586, pp. 76-79, July 4, 1996
	ALLLLL	Pepicelli, et al., "Rapid Communication GDNF Induces Branching and Increased Cell Proliferation in the Ureter of the Mouse", Developmental Biology, Vol. 192, pp. 193-198, 1997
	AMMMMM	Sakurai, et al., "An *in vitro* tubulogenesis system using cell lines derived from the embryonic kidney shows dependence on multiple soluble growth factors", Proc. Natl. Acad. Sci., Vol. 94, pp. 6279-6284, June, 1997
	ANNNNN	Cantley, et al., "Regulation of mitogenesis, motogenesis, and tubulogenesis hepatocyte growth factor in renal collecting duct cells", American Journal of Physiology, Vol. 267, No. 2, pp. F271-F280, August, 1994
	AOOOOO	Barros, et al., "Differential tubulogenic and branching morphogenetic activities of growth factors: Implications for epithelial tissue development", Proc. Natl. Acad. Sci., Vol. 92, pp. 4412-4416, May, 1995
	APPPPP	Sakurai, et al., "EGF receptor ligands are a large fraction of in vitro branching morphogens secreted by embryonic kidney", Am. J. Physiol. Vol. 273, No. 3, pp. F463-F472, September, 1997
	AQQQQQ	Gumbiner, "Eithelial Morphogenesis", Cell, Vol. 69, pp. 385-387, May 1, 1992
	ARRRRR	Rodriguez-Boulan, et al., "Morphogenesis of the Polarized Epithelial Cell Phenotype", Science, Vol. 245, pp. 718-725, August 18, 1989
	ASSSSS	Sukhatme, "Renal Development: Challenge and Opportunity", Seminars in Nephrology, Vol. 12, No. 4, pp. 422-426, September, 1993
	ATTTTT	Vega, et al., "Glial cell line-derived neurotrophic factor activates the receptor tyrosine kinase RET and promotes kidney morphogenesis", Proc. Natl. Acad. Sci., Vol. 93, pp. 10657-10661, October, 1996
	AUUUUU	Sainio, et al., "Glial-cell-line-derived neurotrophic factor is required for bud initiation from ureteric epithelium", Development, Vol. 124, pp. 4077-4087, October, 1997
	AVVVVV	Sweet, et al., "Impaired Organic Anion Transport in Kidney and Choroid Plexus of Organic Anion Transporter 3 (*Oat3 (Slc22a8)*) Knockout Mice", The Journal of Biological Chemistry, Vol. 277, No. 30, pp. 26934-26943, July 26, 2002
	AWWWW	Sweet, et al., "The organic anion transporter family: from physiology to ontogeny and the clinic", Am. J. Physiol. Renal Physiol. Vol. 281, pp. F197-F205, 2001
	AXXXXX	Steer, et al. "A strategy for in vitro propagation of rat nephrons Rapid Communication", Kidney International, Vol. 62, pp. 1958-1965, 2002
	AYYYYY	Nigam, et al., "Toward an understanding of epithelial morphogenesis in health and disease", Current Opinion in Nephrology and Hypertension, Vol. 1, pp. 187-191, 1992
	AZZZZZ	Sakurai, et al., "Identification of pleiotrophin as a mesenchymal factor involved in ureteric bud branching morphogenesis", Development, Vol. 128, pp. 3283-3293, 2001

Examiner Signature	Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.